

Title (en)
OPTIMIZED NOZZLE FOR INJECTING PRESSURIZED WATER CONTAINING A DISSOLVED GAS

Title (de)
OPTIMIERTE DÜSE ZUM INJIZIEREN VON DRUCKWASSER MIT EINEM AUFGELOSTEN GAS

Title (fr)
BUSE OPTIMISÉE D'INJECTION D'EAU PRESSURISÉE CONTENANT UN GAZ DISSOUS

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Application
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Abstract (en)
[origin: WO2016102701A1] The present invention relates to a nozzle for injecting pressurized water containing a dissolved gas, said nozzle comprising: - a cylindrical inlet chamber (20) for said water; - a cylindrical expansion chamber (30) comprising an inlet (301), communicating with said inlet chamber (20) via an orifice (401), and an outlet; - a diffusion chamber (60) of truncated conical cross section communicating with the outlet of said expansion chamber (30) and increasing in width from said expansion chamber; said nozzle comprising means for rotating the flow of water flowing at the outlet of said expansion chamber (30). This injection nozzle makes it possible to maximize the production of microbubbles that are neither too small nor too large and to thus increase the proportion of microbubbles produced, the diameter of which is between 100 and 200 micrometers, which consequently makes it possible to achieve a rapid and effective flotation.

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